

THE PENDING CLAIMS:

1. (Previously Presented) A method for managing congestion in a network switch, said method comprising the steps of:

receiving an incoming packet on a first port of a network switch for transmission to a destination port, wherein said network switch is one of a plurality of network switches configured in a stack;

determining if said destination port is a monitored port;

determining a queue status of said destination port, if said destination port is determined to be a monitored port; and

prescheduling transmission of said incoming packet to said destination port if said destination port is determined to be a monitored port;

wherein the step of prescheduling transmission comprises dropping said incoming packet only when the queue status of the destination port indicates that a queue for the destination port is full, and

wherein the network switches in the stack are connected through high performance interconnect links and the method further comprises stripping a module header from packets received via the high performance interconnect links.

2. (Original) The method as recited in claim 1, wherein said prescheduling step of further comprises the steps of:

classifying said queue status of said destination port; and

taking action in accordance with said classification of said queue status.

3. (Previously Presented) A method for managing congestion in a network switch, said method comprising the steps of:

receiving an incoming packet on a first port of a network switch for transmission to a destination port;

determining if said destination port is a monitored port;

determining a queue status of said destination port, if said destination port is determined to be a monitored port; and

prescheduling transmission of said incoming packet to said destination port if said destination port is determined to be a monitored port;

wherein said prescheduling step of further comprises the steps of:

classifying said queue status of said destination port; and

taking action in accordance with said classification of said queue status;

and

wherein said classifying step further comprises the steps of:

classifying said queue status of said destination port as a first type if a level of data in said queue is less than or equal to a first predetermined level;

classifying said queue status of said destination port as a second type if said level of data in said queue is less than or equal to a second predetermined level and greater than said first predetermined level; and

classifying said queue status of said destination port as a third type if said level of data in said queue is greater than said second predetermined level;

wherein said step of taking action in accordance with the classification of said queue status further comprises the steps of:

writing an entry in a first queue if said queue status of said destination port is classified as said first type;

selecting a second queue and writing said entry into said second queue if said queue status of said destination port is classified as said second type; and

dropping said packet if said queue status of said destination port is classified as said third type.

4. (Canceled)

5. (Original) The method as recited in claim 1, wherein said step of determining if said destination port is a monitored port further comprises the step of receiving a status message on a communication channel.

6. (Canceled)